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DEPARTMENT: Environmental Services

<u>REPORTS TO</u>: Higher level professional engineer or division manager.

<u>SUPERVISES</u>: May provide project or lead supervision over lower level engineering

technical support staff.

## **DEFINITION:**

This is a "flexibly staffed", combination entry/journey level classification within the professional civil engineering series. As such, it gives the City the ability to hire in at either the Engineer I or Engineer II level depending on applicant qualifications and staffing needs.

The distinction between the entry level and journey level work is based on the degree and scope of responsibility to which an incumbent is expected to perform as well as the incumbent's professional engineering registration (EIT for the Engineer I and PE for the Engineer II).

At the Engineer I level: Performs a variety of professional engineering work, at the beginning professional level, in design, planning and construction of public works projects, including street and traffic system improvements, sanitary sewer and water system improvements; manages small to medium sized projects.

At the Engineer II level: Performs a broader variety of professional engineering work, at the experienced professional level, in design, planning and construction of public works projects, including street improvements, sanitary sewer, storm water, and water system improvements and traffic systems. Manages moderate to more complex engineering projects.

### **DISTINGUISHING CHARACTERISTICS:**

The Engineer I is distinguished from the Engineer II in that employees perform work under closer supervision and carry out assignments that are less complex in nature.

The Engineer II is distinguished from the Engineer I in that employees in this class perform work under general supervision and carry out assignments that are more complex in nature and requires the Professional Engineer license. It is distinguished from the Senior Engineer class in that employees in the higher class supervise an engineering section within a division and have major responsibility for a substantial program area.

ESSENTIAL JOB FUNCTIONS: (Any one position may not include all of the duties listed nor do the listed examples include all tasks, which may be found in positions of this class.)

### Civil Engineer I:

Manages smaller, less complex engineering projects; performs contract administration of construction and consulting engineering contracts.

May provide guidance and direction to engineering technicians assigned on a project basis.

Designs public works projects of limited scope, such as streets, sanitary sewer collection, storm water, and water system components.

Writes specifications, assembles contract documents, presides over pre-construction meetings, coordinates construction scheduling, prepares project cost estimates, administers contracts to ensure compliance, and interprets contracts.

Responds to inquiries and complaints from property owners, businesses and the public regarding engineering projects, sanitary and storm sewer and water system problems.

Performs engineering studies; analyzes data; makes recommendations based on findings; prepares correspondence and technical engineering reports.

Under direction, works with representatives of other City departments, other governmental agencies, private developers and consultants, neighborhood and other citizens groups to plan activities, coordinate efforts and resolve problems.

Coordinates and manages the City's industrial pretreatment program; issues and renews permits; monitors industrial discharges; inspects industrial facilities; enforces regulations, assesses fines and takes other actions as appropriate.

Provides technical support and training for computer applications related to engineering activities.

#### Civil Engineer II

Manages the more complex engineering projects; performs contract administration of construction and consulting engineering contracts.

Plans, organizes, coordinates, assigns and evaluates the work of engineering technicians and construction inspectors; provides training and guidance, as needed.

Designs public works projects, such as streets, sanitary sewer collection, storm water, and water system components.

Serves as project engineer on capital improvement or other engineering projects; writes specifications, assembles contract documents, presides over pre-construction meetings, coordinates construction scheduling, prepares project cost estimates, administers contracts to ensure compliance, and interprets contracts.

Works with representatives of other City departments, other governmental agencies, private developers and consultants, neighborhood and other citizens groups to plan activities, coordinate efforts and resolve problems.

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Responds to inquiries and complaints from property owners, businesses and the public regarding engineering projects, sanitary sewer, storm water and water system or transportation system problems.

Performs engineering studies; analyzes data; makes recommendations based on findings; prepares correspondence and technical engineering reports; provides engineering assistance to other City departments, as needed.

Prepares, reviews and monitors annual budget for area of assignment.

Participates in short and long term planning for area of assignment.

### **OTHER JOB FUNCTIONS:**

Performs other related duties as assigned.

#### **WORKING CONDITIONS:**

Duties are primarily performed in an office environment with occasional field work.

#### **QUALIFICATIONS:**

### Knowledge of:

- Broad engineering principles, practices, methods, techniques, materials and equipment related to public works projects.
- Engineering project management and engineering contract administration.
- Computer applications and uses for engineering activities.
- Effective supervisory methods and techniques.

#### Ability to:

- Manage engineering projects effectively.
- Administer construction and engineering contracts effectively, assuring compliance with all standards and provisions.
- Design engineering projects of broad scope and complexity.
- Ability to plan, organize, coordinate, assign and evaluate the work of subordinate technical employees.
- Prepare clear and precise reports of a technical nature.
- Provide technical support and training in the uses of computers and software applications.
- Establish and maintain effective working relationships with other employees, representatives of other governmental agencies, contractors, developers and the public.

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- Communicate effectively, both orally and in writing.
- Physical ability to perform the essential functions of the job.

<u>Education and Experience</u>: Any equivalent combination of education and experience, which provides the applicant with the knowledge, skills, and abilities, required to perform the job. A typical way to obtain the knowledge and abilities would be:

## Engineer I

Bachelor's degree in civil engineering and one year of professional engineering experience preferably related to public works.

## Licenses, Certificates, and Other Requirements:

Valid Drivers License

Possession of a Fundamentals of Engineering certificate (formerly an EIT certificate).

## **Engineer II**

Bachelor's degree in civil engineering and four years of professional engineering experience preferably related to public works.

# Licenses, Certificates, and Other Requirements:

Valid driver's license

Professional Engineer's License (issued by Oregon Board of Engineering Examiners)

Approved: 12/99 Union Code: NR Revised: FLSA status: EX